**PRESIDENCY
UNIVERSITY**
GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

BENGALURU

Department of Research & Development
Mid - Term Examinations - SEPTEMBER 2024

Odd Semester: Ph.D. Course Work		**Date**: 28 /09/2024	
Course Code: CSE5003		**Time**: 2:00pm – 3:30pm	
Course Name: INTERNET OF THINGS APPLICATION		**Max Marks**: 50	
Department: SoCSE& IS		**Weightage**: 25%	

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

	Answer ALL the Questions. Each question carries 5 marks.	4Qx5M=20M
1	Describe the physical design of IoT, specifically focusing on the types of "Things" used in IoT systems. (CO:1 BL: 2)	**5 Marks**
2	Discuss two IoT communication models and their significance in IoT architectures. (CO:1 BL: 2)	**5 Marks**
3	Explain the working of Message Queue Telemetry Transport (MQTT) in IoT communication. ((CO:2 BL: 2)	**5 Marks**
4	Describe the key features and applications of the Zigbee protocol in IoT (CO:2 BL:2)	**5 Marks**

Part B

	Answer ALL Questions. Each question carries 15 marks.	2QX15M=30M
5	Discuss how cloud computing, wireless sensor networks, and big data analytics work together as enabling technologies for IoT. Provide a real-world example to illustrate their combined impact. (CO:1 BL:2)	**15 Marks**
6	Explain the architecture, components, and working of an RFID system. How is RFID technology integrated into IoT systems for data collection and analysis? Analyze the differences between MQTT, AMQP, and COAP as data protocols in IoT. (CO:2 BL:2)	**15 Marks**